REMARKS

Reconsideration and withdrawal of the rejections set forth in the Office action dated March 11, 2003 are respectfully requested. Applicants petition the Commissioner for a 1-month extension of time. A separate petition accompanies this amendment.

I. Amendments

A. In the Specification:

The title is amended to be clearly indicative of the invention to which the claims are directed.

B. In the Claims:

Claim 23 is amended to recite the structural relationship between the one or more channels and the movement area.

By these amendments, no new subject matter has been added.

II. Objections to the Specification

The Examiner objected to the title as allegedly not descriptive. Applicants have amended the title to be clearly indicative of the invention to which the claims are directed.

In view of the above, Applicants respectfully request withdrawal of the objections to the specification.

III. Rejections under 35 U.S.C. §112, second paragraph

Claims 22 and 23 were rejected under 35 U.S.C. §112, second paragraph as allegedly indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicants regard as the invention.

Specifically, claim 23 allegedly fails to recite any structural relationships between the one or more channels and the elements of the movement area recited in claim 22.

Applicants have amended claim 23 to state the relationship of the features.

Accordingly, Applicants respectfully request withdrawal of the rejection under 35 U.S.C. §112, second paragraph.

IV. Rejection under 35 U.S.C. §102

Claims 22 and 23 were rejected under 35 U.S.C. §102(b) as allegedly anticipated by Batchelder (U.S. Patent No. 4,390,403). This rejection is respectfully traversed.

A. The Present Invention

The present invention describes a device for moving charged particles through a medium employing an electric field. The device comprises (i) an electrically non-conductive solid support having an upper surface region, (ii) a movement area formed in the support's upper surface region for holding a fluid medium containing charged particles, the movement area including a main arm and a plurality of side arms connected thereto, and (iii) a plurality of electrodes adapted to contact fluid medium held in the movement area, such that application of a voltage to the electrodes is effective to move charged particles within the movement area.

B. The Prior Art

BATCHELDER describes a method and apparatus for manipulating one or more chemicals within a reaction chamber or housing by dielectrophoretic forces, the motion of electrically neutral matter in non-uniform electric fields. The apparatus includes a housing containing at least two materials having different dielectric constants. A non-uniform electrical field is applied to the two materials. The resulting dielectrophoretic forces vary the positions of materials within the housing.

C. Analysis

According to the M.P.E.P. § 2131, "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference".

Batchelder fails to teach (1) an electrically non-conductive solid support (2) a movement area for holding a fluid medium containing charged particles, (3) a plurality of

electrodes adapted to contact fluid medium held in the movement area, and (4) application of a voltage to the electrodes to move charged particles within the movement area.

Batchelder is concerned with dielectrophoresis. In contrast, the present invention is concerned with electrokinetic movement where two electrodes create an electrical field and charged particles are moved in relation to the field. Batchelder does not intend an "electrode" as the term is used in the subject invention, rather using electrically charged plates that act as capacitors. Thus, the field that Batchelder creates is across the housing and is not concerned with the electrophoretic movement as required by the present claims. Accordingly, as the field is created across the housing, the housing cannot be considered non-conductive as in the present invention.

Further, Batchelder fails to teach the electrodes making contact with the media, instead using an insulator or having the medium be of low conductivity (see col. 4, lines 50-55). Both of these conditions are directly contrary to the electrophoretic conditions required by the presently claimed invention.

Finally, Batchelder fails to teach movement of charged particles by application of a voltage to the electrodes. As described above, the device of the instant claims uses electrokinetic movement, meaning charged particles that will move in accordance with their charge/mass ratio. The movement of charged materials required by the instant claims is quite different from the movement described in the Batchelder invention. The present invention uses electrokinesis created by electrodes in a conductive medium and moves materials in relation to their charge/mass ratio. In contrast, the device of Batchelder uses electrodes insulated from the medium or a substantially non-conductive medium, depends upon the motion of electrically neutral matter in a non-uniform field created by capacitors, and is primarily concerned with using two liquid media of different dielectric constant, *e.g.* aqueous acetic acid and n-heptane (col. 7, lines 46-48).

Accordingly, Applicants submit that standard of strict identity to maintain a rejection under 35 U.S.C. § 102 has not been met. Withdrawal of the rejection under 35 U.S.C. § 102(b) is respectfully requested.

CONCLUSION

In view of the foregoing, Applicants submit that the claims pending in the application are in condition for Allowance. A Notice of Allowance is therefore respectfully requested.

The Examiner is invited to contact Applicants' representative at (650) 838-4410 if it is believed that prosecution of this application may be assisted thereby.

Respectfully submitted,

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